Sage Journals

Psychological Science

Journal indexing and metrics

Contents | Get access | More

Abstract

People sick with infectious illnesses face negative social outcomes, like exclusion, and may take steps to conceal their illnesses from others. In 10 studies of past, current, and projected illness, we examined the prevalence and predictors of infection concealment in adult samples of U.S. university students, health-care employees, and online crowdsourced workers (total N = 4,110). About 75% reported concealing illness in interpersonal interactions, possibly placing others in harm's way. Concealment motives were largely social (e.g., wanting to attend events like parties) and achievement oriented (e.g., completing work objectives). Disease characteristics, including potential harm and illness immediacy, also influenced concealment decisions. People imagining harmful (vs. mild) infections concealed illness less frequently, whereas participants who were actually sick concealed frequently regardless of illness harm, suggesting state-specific biases underlying concealment decisions. Disease concealment appears to be a widely prevalent behavior by which concealers trade off risks to others in favor of their own goals, creating potentially important public-health consequences.

Get full access to this article

View all access and purchase options for this article.

GET ACCESS

Open practices

Open Data Open Materials Preregistration

Pilot studies, materials, data, code, and preregistrations are available on the Open Science Framework (https://osf.io/r9cug/), and additional details are available in the Supplemental Material. This article has received the badges for Open Data, Open Materials, and Preregistration. More information about the Open Practices badges can be found at http://www.psychologicalscience.org/publications/badges.

Transparency

Action Editor: Patricia J. Bauer

Editor: Patricia J. Bauer

Author Contributions

Wilson N. Merrell: Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Visualization; Writing − original draft; Writing − review & editing.

Soyeon Choi: Conceptualization; Methodology; Writing − review & editing.

Joshua M. Ackerman: Conceptualization; Funding acquisition; Supervision; Writing − review & editing.

References

Ackerman J. M., Hill S. E., Murray D. R. (2018). The behavioral immune system: Current concerns and future directions. *Social and Personality Psychology Compass*, 12(2), 57−70. https://doi.org/10.1111/spc3.12371

Google Scholar

Ackerman J. M., Merrell W. N., Choi S. (2020). What people believe about detecting infectious disease using the senses. *Current Research in Ecological and Social Psychology*, 1, Article 100002. https://doi.org/10.1016/j.cresp.2020.100002

Google Scholar

Baumeister R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin*, 91(1), 3−26.

Crossref

Google Scholar

Ben-Ner A., Hu F. (2021). Lying in a finitely repeated game. *Economics Letters*, 201, Article 109741. https://doi.org/10.1016/j.econlet.2021.109741

Google Scholar

Bramley T. J., Lerner D., Sarnes M. (2002). Productivity losses related to the common cold. *Journal of Occupational and Environmental Medicine*, 44(9), 822−829. https://doi.org/10.1097/00043764-200209000-00004

Google Scholar

Breakwell G. (2014). *The psychology of risk*. Cambridge University Press.

Crossref

Google Scholar

Buller D. B., Burgoon J. K. (1996). Interpersonal deception theory. *Communication Theory*, 6(3), 203−242. https://doi.org/10.1111/j.1468-2885.1996.tb00127.x

Google Scholar

Calnan M. (2014, October 1). 93% of staff go to work when ill. *Employee Benefits*. https://www.employeebenefits.co.uk/issues/october-2014-online/93-of-staff-go-to-work-when-ill/

Google Scholar

Chaudoir S. R., Fisher J. D. (2010). The disclosure processes model: Understanding disclosure decision making and postdisclosure outcomes among people living with a concealable stigmatized identity. *Psychological Bulletin*, 136(2), 236−256. https://doi.org/10.1037/a0018193

Google Scholar

Crockett M. J., Kurth-Nelson Z., Siegel J. Z., Dayan P., Dolan R. J. (2014). Harm to others outweighs harm to self in moral decision making. *Proceedings of the National Academy of Sciences, USA*, 111(48), 17320−17325. https://doi.org/10.1073/pnas.1408988111

Google Scholar

DePaulo B. M., Kashy D. A. (1998). Everyday lies in close and casual relationships. *Journal of Personality and Social Psychology*, 74(1), 63−79. https://doi.org/10.1037/0022-3514.74.1.63

Google Scholar

DerSarkissian C. (2022, February 5). *Common cold*. WebMD. https://www.webmd.com/cold-and-flu/common_cold_overview#:~:text=In%20the%20course%20of%20a,in%20daycare%20centers%20and%20schools

Google Scholar

Earnshaw V. A., Brousseau N. M., Hill E. C., Kalichman S. C., Eaton L. A., Fox A. B. (2020). Anticipated stigma, stereotypes, and COVID-19 testing. *Stigma and Health*, 5(4), 390−393. https://doi.org/10.1037/sah0000255

Google Scholar

Gabriel T. (2020, May 28). A G.O.P. lawmaker had the virus. Nobody told Democrats exposed to him. *The New York Times*. Retrieved from https://www.nytimes.com/2020/05/28/us/politics/andrew-lewis-brian-sims-pa-house-coronavirus.html

Google Scholar

Gelfand M. J., Jackson J. C., Pan X., Nau D., Pieper D., Denison E., Dagher M., Van Lange P. A. M., Chiu C.-Y., Wang M. (2021). The relationship between cultural tightness−looseness and COVID-19 cases and deaths: A global analysis. *The Lancet Planetary Health*, 5(3), e135−e144. https://doi.org/10.1016/S2542-5196(20)30301-6

Google Scholar

Hemp P. (2004, October). Presenteeism: At work—but out of it. *Harvard Business Review*. https://hbr.org/2004/10/presenteeism-at-work-but-out-of-it

Google Scholar

Henderson R. K., Schnall S. (2021). Disease and disapproval: COVID-19 concern is related to greater moral condemnation. *Evolutionary Psychology*, 19(2), 14747049211021524.

Crossref

Google Scholar

Kivetz R., Urminsky O., Zheng Y. (2006). The goal-gradient hypothesis resurrected: Purchase acceleration, illusionary goal progress, and customer retention. *Journal of Marketing Research*, 43(1), 39−58. https://doi.org/10.1509/jmkr.43.1.39

Google Scholar

Lasselin J., Lekander M., Paues-Göranson S., Olsson M. J., Axelsson J. (2018). Communication of health in experimentally sick men and women: A pilot study. *Psychoneuroendocrinology*, 87, 188−195. https://doi.org/10.1016/j.psyneuen.2017.10.024

Google Scholar

Lee R. S., Kochman A., Sikkema K. J. (2002). Internalized stigma among people living with HIV-AIDS. *AIDS and Behavior*, 6, 309−319. https://doi.org/10.1023/A:1021144511957

Google Scholar

Loewenstein G. (2005). Hot-cold empathy gaps and medical decision making. *Health Psychology*, 24(Suppl. 4), S49−S56. https://doi.org/10.1037/0278-6133.24.4.S49

Google Scholar

Lopes P. C., Adelman J., Wingfield J. C., Bentley G. E. (2012). Social context modulates sickness behavior. *Behavioral Ecology and Sociobiology*, 66(10), 1421−1428. https://doi.org/10.1007/s00265-012-1397-1

Google Scholar

Mogharab V., Ostovar M., Ruszkowski J., Hussain S. Z. M., Shrestha R., Yaqoob U., Aryanpoor P., Nikkhoo A. M., Heidari P., Jahromi A. R., Rayatdoost E., Ali A., Javdani F., Farzaneh R., Ghanaatpisheh A., Habibzadeh S. R., Foroughian M., Ahmadi S. R., Akhavan R., . . . Hatami N. (2022). Global burden of the COVID-19 associated patient-related delay in emergency healthcare: A panel of systematic review and meta-analyses. *Globalization and Health*, 18, Article 58. https://doi.org/10.1186/s12992-022-00836-2

Google Scholar

Murray D. R., Schaller M. (2016). The behavioral immune system: Implications for social cognition, social interaction, and social influence. *Advances in Experimental Social Psychology*, 53, 75−129. https://doi.org/10.1016/bs.aesp.2015.09.002

Google Scholar

Muscatell K. A., Inagaki T. K. (2021). Beyond social withdrawal: New perspectives on the effects of inflammation on social behavior. *Brain, Behavior, & Immunity - Health*, 16, Article 100302. https://doi.org/10.1016/j.bbih.2021.100302

Google Scholar

Muscatell K. A., Moieni M., Inagaki T. K., Dutcher J. M., Jevtic I., Breen E. C., Irwin M. R., Eisenberger N. I. (2016). Exposure to an inflammatory challenge enhances neural sensitivity to negative and positive social feedback. *Brain, Behavior, and Immunity*, 57, 21−29. https://doi.org/10.1016/j.bbi.2016.03.022

Google Scholar

Neel R., Kenrick D. T., White A. E., Neuberg S. L. (2016). Individual differences in fundamental social motives. *Journal of Personality and Social Psychology*, 110(6), 887−907. https://doi.org/10.1037/pspp0000068

Google Scholar

Newheiser A.-K., Barreto M. (2014). Hidden costs of hiding stigma: Ironic interpersonal consequences of concealing a stigmatized identity in social interactions. *Journal of Experimental Social Psychology*, 52, 58−70. https://doi.org/10.1016/j.jesp.2014.01.002

Google Scholar

Oaten M., Stevenson R. J., Case T. I. (2011). Disease avoidance as a functional basis for stigmatization. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 366(1583), 3433−3452. https://doi.org/10.1098/rstb.2011.0095

Google Scholar

Pachankis J. E., Hatzenbuehler M. L., Wang K., Burton C. L., Crawford F. W., Phelan J. C., Link B. G. (2018). The burden of stigma on health and well-being: A taxonomy of concealment, course, disruptiveness, aesthetics, origin, and peril across 93 stigmas. *Personality and Social Psychology Bulletin*, 44(4), 451−474. https://doi.org/10.1177/0146167217741313

Google Scholar

Quinn D. M., Chaudoir S. R. (2009). Living with a concealable stigmatized identity: The impact of anticipated stigma, centrality, salience, and cultural stigma on psychological distress and health. *Journal of Personality and Social Psychology*, 97(4), 634−651. https://doi.org/10.1037/a0015815

Google Scholar

Regenbogen C., Axelsson J., Lasselin J., Porada D. K., Sundelin T., Peter M. G., Lekander M., Lundström J. N., Olsson M. J. (2017). Behavioral and neural correlates to multisensory detection of sick humans. *Proceedings of the National Academy of Sciences, USA*, 114(24), 6400−6405. https://doi.org/10.1073/pnas.1617357114

Google Scholar

Ridenhour B. J., Braun A., Teyrasse T., Goldsman D. (2011). Controlling the spread of disease in schools. *PLOS ONE*, 6(12), Article e29640. https://doi.org/10.1371/journal.pone.0029640

Google Scholar

Sacco D. F., Young S. G., Hugenberg K. (2014). Balancing competing motives: Adaptive trade-offs are necessary to satisfy disease avoidance and interpersonal affiliation goals. *Personality and Social Psychology Bulletin*, 40(12), 1611−1623. https://doi.org/10.1177/0146167214552790

Google Scholar

Sawada N., Auger E., Lydon J. E. (2018). Activation of the behavioral immune system: Putting the brakes on affiliation. *Personality and Social Psychology Bulletin*, 44(2), 224−237. https://doi.org/10.1177/0146167217736046

Google Scholar

Schaller M., Park J. H. (2011). The behavioral immune system (and why it matters). *Current Directions in Psychological Science*, 20(2), 99−103. https://doi.org/10.1177/0963721411402596

Google Scholar

Schrock J. M., Snodgrass J. J., Sugiyama L. S. (2020). Lassitude: The emotion of being sick. *Evolution and Human Behavior*, 41(1), 44−57. https://doi.org/10.1016/j.evolhumbehav.2019.09.002

Google Scholar

Shattuck E. C., Perrotte J. K., Daniels C. L., Xu X., Sunil T. S. (2021). Signaling sickness: The role of recalled sickness behavior and psychosocial factors in shaping communication style. *Evolution, Medicine, and Public Health*, 9(1), 221−231. https://doi.org/10.1093/emph/eoab017

Google Scholar

Slepian M. L. (2022). A process model of having and keeping secrets. *Psychological Review*, 129(3), 542−563. https://doi.org/10.1037/rev0000282

Google Scholar

Slepian M. L., Chun J. S., Mason M. F. (2017). The experience of secrecy. *Journal of Personality and Social Psychology*, 113(1), 1−33. https://doi.org/10.1037/pspa0000085

Google Scholar

Steinkopf L. (2017). The social situation of sickness: An evolutionary perspective on therapeutic encounters. *Evolutionary Psychological Science*, 3(3), 270−286. https://doi.org/10.1007/s40806-017-0086-8

Google Scholar

Trope Y., Liberman N. (2010). Construal-level theory of psychological distance. *Psychological Review*, 117(2), 440−463. https://doi.org/10.1037/a0018963

Google Scholar

Whitley A. (2020, June 24). Travelers are hiding their coronavirus infections—And airlines can do little about it. *Fortune*. https://fortune.com/2020/06/24/airlines-travel-flight-hiding-coronavirus-infection/

Google Scholar

Young S. D., Nussbaum A. D., Monin B. (2007). Potential moral stigma and reactions to sexually transmitted diseases: Evidence for a disjunction fallacy. *Personality and Social*

Psychology Bulletin, 33(6), 789−799. https://doi.org/10.1177/0146167207301027

Google Scholar

Supplementary Material

Please find the following supplemental material visualised and available to download via Figshare in the display box below. Where there are more than one item, you can scroll through each tab to see each separate item.

Please note all supplemental material carries the same license as the article it is here associated with

- Supplemental Material

File (sj-docx-1-pss-10.1177_09567976231221990.docx)

DOWNLOAD | **900.60 KB**

You currently have no access to this content. Visit the access options page to authenticate.

View full text | Download PDF

Also from Sage

CQ Library

Elevating debate

Sage Data

Uncovering insight

Sage Business Cases

Shaping futures

Sage Campus

Unleashing potential

Sage Knowledge

Multimedia learning resources

Sage Research Methods

Supercharging research

Sage Video

Streaming knowledge

Technology from Sage

Library digital services